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ABSTRACT

The potential usefulness of self-assessment of low-level aptitudes, such as basic or elementary reading, writing, and calculating, was explored in a test validation context, following the model of B. Davey (1980, 1990). Self-assessments were sought to provide criterion-related or construct validities that might otherwise be unobtainable for some multiple-hurdles civil service examinations. Self-assessment ratings were completed by 530 male and female, Black (49%), White (8%), and Hispanic (40%) candidates for the job of school bus driver in a large school district. Candidates evaluated themselves in the following areas: (1) high school grades in mathematics, English, and science courses; (2) ability to use logic, read and understand written materials, and perform basic mathematics; and (3) willingness to admit shortcomings and confidence in one's abilities. Candidates also took the 45-item multiple-choice Bus Driver Trainee Aptitude Test. A skewed five-point Likert type rating scale was constructed and administered to the subjects. Comparison of the self-ratings and the examination scores support the hypothesis proposed by Davey that self-assessment can be a useful tool for test validation. Seven tables present information about the candidates. A 21-item list of references and an appendix containing the Likert-type survey form completed by candidates are included. (SLD)

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SELF-ASSESSMENT AS CRITERION IN THE VALIDATION OF A PAPER-AND-PENCIL TEST FOR SCHOOL BUS DRIVER TRAINEES

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SELF-ASSESSMENT AS CRITERION IN THE VALIDATION OF A PAPER-AND-PENCIL TEST FOR SCHOOL BUS DRIVER TRAINEES

ABSTRACT

Following Davey's (1980, 1990) model for soliciting self-ratings from candidates for the purpose of providing criterion-related or construct validities which might otherwise be unobtainable for some multiple hurdles civil service examinations, self-assessment ratings were collected from 530 School Bus Driver Trainee applicants for employment with the Los Angeles Unified School District following the administration of a written test. Comparison of the self-ratings with examination scores support the hypothesis proposed by Davey suggesting that self-assessment can be a useful tool for test validation purposes.

SELF-ASSESSMENT AS CRITERION IN THE VALIDATION OF A PAPER-AND-PENCIL TEST FOR SCHOOL BUS DRIVER TRAINEES

The purpose of this research is to examine the potential usefulness of self-assessment of low level aptitudes, such as basic or elementary reading, writing, and calculating, in a test validation context. Self-assessment, in the present study, refers to the estimates of achievement or abilities which job applicants make of themselves. The use of self-assessment within an organization, especially in the areas of personnel selection and performance evaluation, has been widely discussed and utilized (e.g., Ashfold, 1989; Anderson, Warner, & Spencer, 1984; Mabe & West, 1982; Ash, 1980; Heneman, 1980; Levine, 1980; Meyer, 1980; Primoff, 1980; Thornton, 1980; van Rijn, 1980; Levine, Flory, & Ash, 1977).

Levine, et. al. (1977) reported correlations between self-assessment and related objective test scores ranging from .03 to .58, with a median of .36. They found a non-significant trend of higher self-assessment ratings among minorities. They also reported a correlation of .62 or higher between self-assessed and actual typing ability among 569 applicants for clerical jobs. Ash (1980) reported only non-significant differences between self-assessment and typing ability among blacks, hispanics, and whites. This led him to conclude that minorities are not adversely affected by the use of self-assessment of typing ability.

In a review and meta-analysis study of the self-evaluation of ability, Mabe and West (1982) reported, after adjusting sample size and criterion unreliability, a low mean validity coefficient (mean $\underline{r}$ = .29) with high variability ($\underline{SD}$ = .25) with measures of performance. They also

found that more accurate self-assessed abilities were related to high intelligence, high achievement, status, and internal locus of control. Among others, Mabe and West suggested that guaranteeing anonymity of individual self-assessment responses and providing a standard frame of reference against which self-assessments are to be made, are ways to improve the validity of self-assessment.

Recent reviews by Muchinsky (1986) and Schmitt and Noe (1986) further suggest that self-assessment, if properly used, could be viewed as a better tool than several other more conventional personnel selection methods. Specifically, Muchinsky (1986) and Schmitt and Noe (1986) reviewed various personnel selection methods and evaluated them using standards such as validity, fairness and/or subgroup mean difference, applicability and cost. Their comparisons, as summarized in Tables 1 and 2, revealed that, according to the evaluation standards, self-assessment ranked median among all the selection methods reviewed. Overall, self-assessment has low to moderate validity, high fairness and/or small subgroup mean difference, moderate applicability, and low cost.

Insert Tables 1 & 2 about here

Low validity is the major criticism leveled at self-assessment, because of its susceptibility to problems of social desirability and inflation. Methods have been suggested to counter tendencies toward inflation bias and leniency when self-assessment devices are used as predictors in actual employment settings (Anderson, et al, 1984) and for test validation purposes (Lin & Manligas, 1987; Manligas & Lin, 1988). Davey (1990, 1980), however, is the only researcher to incorporate a

method for minimizing leniency while proposing the use of self-assessments as criteria for test validation.

According to Davey (1990, 1980), criterion-related validation may not be obtainable for many selection procedures for various reasons, including range restriction due to the small number of individual hired, and problems in identifying and obtaining adequate criteria. Content validity thus becomes the only available standard defense for such tests. Davey proposes that content validity can be supplemented by construct and criterion-related validities when self-assessments are collected at the time of the administration of the first test part, maximizing the range of scores. Davey's (1990, 1980) reports indicate that such a method can yield useful and reliable results for both entry-level Career Trainee and Firefighter tests.

The present study attempts to replicate Davey's method using a different test sample. Based on the literature reviewed above, the following three hypotheses were tested: 1. Self-assessments of the ability to read, calculate, and interpret information will correlate moderately well with their corresponding written test scores; 2. Minority group members will not produce significantly different self-assessment scores than majority group members; and 3. Females will not produce significantly different self-assessment scores than males.

METHOD

Participants

The participants consisted of 588 applicants for School Bus Driver Trainee who took the Bus Driver Trainee Aptitude Written Multiple Choice Test. Of those who voluntarily submitted information about their

education, ethnicity, gender and age, 38% had completed high school and 38% had completed some college courses; 49% were black, 40% were hispanic and 8% were white; 46% were female; and the mean age was 29 years.

The Bus Driver Trainee Aptitude Test (Predictor)

The Bus Driver Trainee Aptitude Test is a paper and pencil, 45-item multiple choice instrument used to screen entrants into the Bus Driver Training Program conducted by a large, West Coast school district. The training program is a four-week course that begins with a week of in-class instruction followed by three weeks of behind-the-wheel of a bus instruction. In general, the in-class portion of the Training Program covers driving rules, regulations, and laws. Four "texts" are used as the bases for instruction: the California Driver Handbook, the Manual of First-Aid Practice for School Bus Drivers, the California Commercial Driver Handbook, and the California Highway Patrol Passenger Transportation Safety Handbook.

The job analysis study revealed that the abilities to read, to count, and to recognize appropriate sources for obtaining information are critical elements for success in this Training Program. It was determined, thus, that the new examination would consist of a single multiple choice written test booklet, consisting of three, equally-weighted subtests with a total of 45 questions in: arithmetic, reading comprehension, and interpretation of information. Based on a sample of 530, this written test yielded a KR-20 reliability of .86 for the total test, .74 for the arithmetic subtest, .64 for the interpretation of information subtest, and .74 for the reading comprehension subtest.

The Participant Survey Form (Criterion)

Slightly more than 90% (N=530) of the participants volunteered to complete the Participant Survey Form which was administered immediately after the written test. The survey presented the self-assessment questions and asked candidates to provide information or to evaluate themselves in the following categories: high school grades in mathematics, English, and science courses; the ability to use logic, read and understand written material, perform basic mathematical problems, and reason in mathematical terms; and willingness to admit shortcomings, and confidence in one's abilities.

As suggested by Davey (1990, 1980), a skewed five-point Likert type rating scale was constructed (Appendix A). The descriptive anchors for each point are presented in favorable terms to counter inflation and leniency effects, and maximize discrimination among applicants. For example, the lowest point on the scale corresponds to only "below average" ability, and points 2-5 refer to increasingly higher degrees of better than average ability.

RESULTS

Descriptive statistics and intercorrelations for the Bus Driver Trainee Aptitude test are reported in Table 3. The three subtests, arithmetic, interpreting information, and reading comprehension, correlated significantly with each other, implying that there is a heavy "G" factor underlying these aptitudes.

Table 4 presents means, standard deviations, and intercorrelations among self-assessment questionnaire items, including high school grades and the assessments of abilities corresponding to the written test. With

respect to high school grades, science correlated higher (r=.45) with English than with mathematics (r=.26), though both of these correlations were significant at $p<.01$. The correlations ranged from .49 to .78 among the four abilities: using logic, reading and understanding written material, performing basic mathematic problems, and reasoning in mathematical terms.

The correlational data for high school grades and self-assessed abilities with the written test scores are reported in Table 5. These data reveal that, overall, there are significant positive correlations between self-assessed levels of ability (for arithmetic, interpreting information, and reading and understanding written material) and the written test scores. Specifically, the arithmetic portion of the written test correlated very highly (r=.42) with self-reported average high school grades in mathematics, self-assessed abilities in performing basic mathematical problems (r=.41), and reasoning in mathematical terms (r=.33). The interpreting information portion of the written test also correlated highly (r=.33) with self-reported average high school grade in mathematics, but not as highly with English and science grades (rs=.20 & .11 respectively). This interpreting information written subtest also correlated highly with self-assessed abilities in using logic (r=.27), reading and understanding written material (r=.30), performing basic mathematical problems (r=.33), and reasoning in mathematical terms (r=.30). Moreover, the reading comprehension portion of the written test also positively correlated with self-reported average high school grades in mathematics (r=.21), English (r=.23), and science (r=.11). The reading comprehension subtest scores also correlated significantly with all the self-assessed abilities, the rs ranged from .15 to .25.

Insert Tables 3, 4, & 5 about here

The analysis of individual difference variables such as education, age, gender, and ethnicity revealed some interesting results. First, years of self-reported education correlated significantly (all ps <.01) with both the written test final and three sub-tests: arithmetic, interpreting information, and reading comprehension (rs are .38, .34, .25, & .34 respectively). Education also correlated significantly with reported high school grades in mathematics (r=.23), English (r=.22), and science (r=.23). Moreover, reported years of education provided significant positive correlations with self-assessed abilities: ability to use logic (r=.27), ability to read and understand written material (r=.22), ability to perform basic mathematical problems (r=.19), and mathematical reasoning ability (r=.17). All these correlations were significant at the $p < .01$ level. Age produced negative correlations with the reading comprehension sub-test ($r = -.18$, $p < .001$) and self-reported English grade in High school ($r = -.11$, $p < .05$). Age also correlated negatively with self-assessed confidence of one's own abilities ($r = -.14$, $p < .001$).

Table 6 provides the mean written test scores and self-assessed abilities scores for females and males. The arithmetic sub-test average score was lower for females. Self-assessed abilities for using logic, reading and understanding written material, and reasoning in mathematical terms generally resulted in lower scores for women. Females also rated their confidence in their own abilities lower as compared to males.

The mean ethnic group differences for both written test scores and self-assessed abilities are provided in Table 7. White group members

generally performed better than both black and hispanic group members on the entire written test and its three sub-tests. Black group members had significantly higher reading comprehension sub-test scores than hispanic group members ($t = 4.27$, $p < .001$). There were also significant group differences in their self-assessed abilities in using logic and reading and understanding written material. White group members had much higher self-assessments in both areas than did black and hispanic group members, but black participants reported higher self-assessment for logic ability ($t = 2.57$, $p < .01$) and the ability to read and understand written material ($t = 3.37$, $p < .001$) than hispanic group members. Whites also reported more willingness to evaluate themselves objectively and admit shortcomings than the other two groups, while black group members reported significantly higher confidence in their abilities than did hispanic and white group members.

Insert Tables 6 & 7 about here

The pass point for the Bus Driver Trainee examination was set at 56%, i.e., successful candidates have to answer correctly at least 25 questions out of the total of 45. Among the 453 candidates who identified their genders, 117 of 210 (55.7%) females and 152 of 243 (62.6%) males passed the written test. With regard to the three major ethnicities, among 441 candidates with ethnicity identifiable, 140 of 221 (63.3%) blacks, 98 of 182 (53.8%) hispanics, and 26 of 38 (68.4%) whites passed the written test. All candidates who passed the written test were offered the opportunity to enroll in Bus Driver Training Program.

DISCUSSION

The major conclusion to be drawn from this study is that self-assessments of the abilities to use logic, read and understand written material, perform basic mathematical problems, and reason in mathematical terms correlate moderately well with corresponding objective test scores of similar abilities among Bus Driver Trainee applicants. Thus, hypothesis one is partially supported. Specifically, the arithmetic sub-test score appeared to be the best predictor as it related to high school grade in mathematics, self-assessed ability and reasoning ability related to mathematics. This strong relationship did not hold for the other variables. The self-assessments were likely somewhat inflated in that most candidates rated themselves at least above average. However, by adopting Davey's skewed rating scale, enough variability occurred in their ratings to cause the correlations to be interpretable. For the most part, these results confirm Davey's research that self-assessments of abilities can be used as criterion in validating entry level aptitude test results.

Overall, whites generally assessed their abilities and high school grades as or more highly than did other ethnicities. Significant differences were observed among the three largest participating ethnic groups in all self-assessments of abilities other than self-assessment related to mathematics. On the other hand, hispanics assessed themselves lower than did blacks and whites in reading comprehension and related areas.

The present research revealed that female achieved a significantly lower score on the arithmetic subtest than did males, although there was no significant difference in overall score (Table 6). This result for the arithmetic subtest is consistent with the conventional finding that

females perform somewhat lower than males in mathematics-related tests (see Lender, 1991 for a review). Females in this study also had significantly lower self-assessment ratings for their abilities to perform basic arithmetic and to reason in mathematical terms, even though the "harder" criterion of self-reported grades in high school mathematics did not differ from males. This finding might at first glance lend support to the utility of self-assessments of abilities for test validation purposes. However, more in depth examination of the data revealed some counter-intuitive results with respect to gender differences, in that self-assessment ratings had poorer predictive power for females than for males. Further research must explore the influence of gender before the real utility of self-assessment can be thoroughly evaluated.

At least two methodological deficiencies about this study need to be mentioned. First, Davey (1980, 1990) recommended that self-assessment ratings should be collected prior to the written test to avoid any possible test result contamination resulting from the fact that participants may use their test results as the frame of reference to guide their ratings. However, in the present study, all the questionnaires were administered after instead of before the written test. The extent to which this procedure has inflated (or, deflated) the correlations between test scores and self-assessed abilities is unknown. Future research is needed on the actual testing effects on the self-assessment ratings. Second, it is always desirable to have multiple items for each of the dimensions assessed to ensure the stability and reliability of the scale score. The Participant Survey Form was composed of only a single item for each dimension. As a result, reliability estimates for dimensions were not available.

Another area of interest not addressed by this study but related to the concerns expressed above, is the mental processes involved in contributing to the observed results, a research topic which Levine (1980) has suggested as important for future research. Though it is important to achieve positive outcomes such as high reliability and validity, we also believe it is equally important to understand what factors made the self-assessment valid. Theories and models such as those proposed by Ashford (1989), Bandura (1980), and Epstein (1973) in the areas of self-concept and self-regulation behaviors need to be carefully reviewed in order to gain new perspectives on the mental process of self-assessment. Research in the area of social comparison , especially related to self-ratings also deserve some attention (Farh & Dobbins, 1989).

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Table 1.
Assessment of Eleven Personnel Selection Methods Along Four Evaluative Standards (From Muchinsky, 1986, p.60)

	Evaluative Standard			
Selection Method	Validity	Fairness	Applicability	Cost
Intelligence Tests	Moderate	Moderate	High	Low
Aptitude/Ability Tests	Moderate	High	Moderate	Low
Personality/Interest Tests	Moderate	High	Low	Moderate
Interviews	Low	Moderate	High	Moderate
Work Samples	Moderate	High	Low	High
Situational Exercises	Moderate	(unknown)	Low	Moderate
Biographical Information	High	Moderate	High	Low
Peer Assessment	High	Moderate	Low	Low
Self Assessment	Low	High	Moderate	Low
Letter of Reference	Low	(unknown)	High	Low
Assessment Center Evaluation	High	High	Low	High

Table 2.
Level of Validity and Subgroup Mean Differences for Various Predictors (From Schmitt, 1986, p.92)

Predictor	Validity	Subgroup Mean Difference
Cognitive Ability and Special Aptitude	Moderate	Moderate
Personality	Low	Small
Interest	Low	?*
Physical Ability	Moderate-High	Large#
Biographical Info.	Moderate	?
Interviews	Low	Small(?)
Work Samples	High	Small
Seniority	Low	Large(?)
Peer Evaluations	High	?
Reference Checks	Low	?
Academic Performance	Low	?
Self Assessment	Moderate	Small
Assessment Centers	High	Small

* Indicates either a lack of data or inconsistent data.
# Mean differences largely between male and female subgroups.

Table 3.
Descriptive Statistics and Intercorrelations of Bus Driver Trainee Written Test Sub-tests and Final Scores

Written Test	Mean	SD	1.	2.	3.
1. Final	26.75	7.30	—		
2. Arithmetics	9.15	3.12	.82		
3. Interpreting Information	7.78	2.62	.83	.53	
4. Reading Comprehension	9.83	3.08	.84	.48	.58

Note: $N = 530$, $p < .001$ for all rs.
There are 45 multiple-choices items in the whole test, 15 items contains in each of the three sub-tests.

Table 4.
Descriptive Statistics and Intercorrelations of Bus Driver Trainee Self-Assessment Questionnaire Items

	Mean	SD	1.	2.	3.	4.	5.	6.	7.	8.
High School Grade in:										
1. Mathematics	3.47	.70	—							
2. English	3.63	.77	.30							
3. Science	3.51	.74	.26	.45						
Ability to:										
4. Use Logic	2.98	.97	.24	.23	.24					
5. Read & Understand Written Material	3.02	1.05	.20	.29	.22	.66				
6. Perform Basic Mathematical Problems	2.78	1.05	.52	.17	.19	.49	.48			
7. Reason in Mathematical Terms	2.64	.95	.51	.18	.26	.54	.54	.78		
8. Willingness to Admit Shortcomings	3.06	1.06	.12	.15	.22	.58	.54	.40	.42	
9. Confidence in Your Abilities	3.36	1.12	.15	.21	.24	.58	.62	.48	.56	.57

Note: 467 <= N <= 530, p <.01 for all rs.
Items 1 to 3: 5=A, 4=B, 3=C, 2=D, 1=F.
Items 4 to 9: 5=very high (upper 5%), 4=high (upper 15%), 3=above average, 2=about average, 1=below average.

Table 5.
Intercorrelations of Self-Assessment Questionnaire Items with Bus Driver Trainee Written Sub-tests and Final Scores

		Written Test		
High School Grade in:	Final	Arith-matics	Interpreting Information	Reading Comprehension
1. Mathematics	.39	.42	.33	.21
2. English	.19	.06	.20	.23
3. Science	.15	.16	.11	.11
Ability to:				
4. Use Logic	.28	.19	.27	.25
5. Read & Understand Written Material	.27	.16	.30	.23
6. Perform Basic Mathematical Problems	.38	.41	.33	.20
7. Reason in Mathematical Terms	.32	.33	.30	.15
8. Willingness to Admit shortcomings	.17	.10	.16	.16
9. Confidence in Your Abilities	.20	.14	.16	.20

Note: $467 \leq N \leq 530$, $p < .01$ for all $rs \geq .11$.
There are 45 multiple-choices items in the whole test, 15 items contains in each of the sub-tests.
Items 1 to 3: 5=A, 4=B, 3=C, 2=D, 1=F.
Items 4 to 9: 5=very high (upper 5%), 4=high (upper 15%), 3=above average, 2=about average, 1=below average.

Table 6.
Mean Bus Driver Trainee Written Test Scores and Self-assessed Level of Abilities for Female and Male Groups

	Female			Male			
	N	Mean	SD	N	Mean	SD	t
Written Test							
Final	196	26.65	6.87	223	27.81	6.97	-1.72
Arithmetics	196	8.90	3.07	223	9.57	3.02	-2.25*
Interpreting Information	196	7.65	2.48	223	8.12	2.60	-1.92
Reading Comprehension	196	10.10	2.89	223	10.12	2.84	-.05
Self-assessed High School Grade in:							
Mathematics	179	3.46	.68	207	3.51	.70	-.77
English	185	3.70	.75	206	3.61	.70	1.31
Science	174	3.49	.67	200	3.54	.73	-.78
Self-assessed Ability to:							
Use Logic	199	2.89	1.03	223	3.12	.96	-2.33*
Read & Understand Written Material	199	2.96	1.10	222	3.12	1.05	-1.54
Perform Basic Mathematical Problems	198	2.65	1.03	223	2.96	1.08	-3.04**
Reason in Mathematical Terms	198	2.50	.93	223	2.80	.97	-3.21**
Willingness to Admit shortcomings	199	3.04	1.09	223	3.14	1.09	-.97
Confidence in Your Abilities	199	3.26	1.13	223	3.49	1.10	-2.12*

Note: There are 45 multiple-choices items in the whole test; 15 items are in each of the three subtests. ** $p < .01$; * $p < .05$.
For self-assessed High School grades: 5=A, 4=B, 3=C, 2=D, 1=F.
For self-assessed abilities: 5=very high (upper 5%), 4=high upper 15%), 3=above average, 2=about average, 1=below average.

Table 7.
Mean Bus Driver Trainee Written Test Scores and Self-assessed Level of Abilities for Black, Hispanic, and White Groups

	Black			Hispanic			White			
	N	Mean	SD	N	Mean	SD	N	Mean	SD	F
Written Test										
Final	208	27.28	6.39	168	26.43	7.11	34	31.56	8.25	7.92**
Arithmetic	208	8.85	2.93	168	9.35	3.16	34	10.79	3.14	6.22**
Interpreting Information	208	7.82	2.39	168	7.69	2.48	34	9.79	3.03	10.54**
Reading Comprehension	208	10.60	2.53	168	9.39	2.92	34	10.97	3.50	10.56**
Self-assessed High School Grade in:										
Mathematics	196	3.50	.65	147	3.43	.70	35	3.51	.85	.52
English	201	3.66	.70	146	3.57	.74	35	3.89	.80	2.81
Science	193	3.49	.65	139	3.46	.68	34	3.74	.90	2.23
Self-assessed Ability to:										
Use Logic	210	3.09	1.02	166	2.83	.93	37	3.35	1.01	5.74**
Read & Understand Written Material	210	3.19	1.15	166	2.82	.93	37	3.22	1.03	6.00**
Perform Basic Mathematical Problems	209	2.82	1.08	166	2.73	1.02	37	3.00	1.20	.99
Reason in Mathematical Terms	210	2.66	.97	165	2.58	.92	37	2.86	1.13	1.34
Willingness to Admit shortcomings	210	3.19	1.12	166	2.89	1.02	37	3.43	1.01	5.69**
Confidence in Your Abilities	210	3.52	1.17	166	3.26	1.06	37	3.19	1.08	3.22*

Note: There are 45 multiple-choices items in the whole test; 15 items are in each of the three subtests. ** $p < .01$; * $p < .05$.
For self-assessed High School grades: 5=A, 4=B, 3=C, 2=D, 1=F.
For self-assessed abilities: 5=very high (upper 5%), 4=high (upper 15%), 3=above average, 2=about average, 1=below average.

Appendix A.
Bus Driver Training Program Participant Survey Form (Page 1 of 2)

Los Angeles Unified School District
Personnel Selection Branch

BUS DRIVER TRAINING PROGRAM

Participant Survey Form

The Personnel Selection Branch is conducting a survey of the people applying for entrance into the Bus Driver Training Program. The information you provide will assist us in increasing the effectiveness of this examination by ensuring that it is fair and valid. Your answers to the following questions will be used for research purposes only and will NOT be used to determine whether or not you are a suitable candidate for Bus Driver training. These surveys will be used to improve our testing procedures for selecting candidates for this training program in the future. Thank you for your cooperation.

1. What is your Social Security number? __ __ __ - __ __ - __ __ __ __

2. What is the highest level of education you have completed? (Check one)

   ____ Did not complete high school
   ____ Some college level courses
   ____ Completed high school (or equivalent)
   ____ Completed college

3. When you were in high school, what grade did you usually receive in MATHEMATICS courses? (Circle grade or check last statement)

   A B C D F S U ____ Did not take MATH courses

4. When you were in high school, what grade did you usually receive in ENGLISH courses? (Circle grade or check last statement)

   A B C D F S U ____ Did not take ENGLISH courses

5. When you were in high school, what grade did you usually receive in SCIENCE courses? (Circle grade or check last statement)

   A B C D F S U ____ Did not take SCIENCE courses

** **PLEASE TURN TO THE OTHER SIDE** **

Appendix A.
Bus Driver Training Program Participant Survey Form (Page 2 of 2)

The following questions each describe a personal trait and ask you to describe yourself according to that trait. Please check the response that most closely describes you according to that trait.

ON THIS TRAIT I WOULD RATE MYSELF AS:

6. ABILITY TO USE LOGIC: Ability to analyze, evaluate and size up problems by using sound judgment and logic.
   ____ Below average
   ____ About average
   ____ Above average
   ____ High (upper 15% of people)
   ____ Very high (upper 5%)

7. ABILITY TO READ AND UNDERSTAND WRITTEN MATERIAL: Ability to read and understand written manuals, instructions, memos, etc.
   ____ Below average
   ____ About average
   ____ Above average
   ____ High (upper 15% of people)
   ____ Very high (upper 5%)

8. WILLINGNESS TO ADMIT SHORTCOMINGS: Willingness to evaluate yourself objectively and admit weaknesses as easily as strengths to other people.
   ____ Below average
   ____ About average
   ____ Above average
   ____ High (upper 15% of people)
   ____ Very high (upper 5%)

9. ABILITY TO PERFORM BASIC MATHEMATICAL PROBLEMS: Ability to add, subtract, multiply, divide, calculate percentages and decimals, etc.
   ____ Below average
   ____ About average
   ____ Above average
   ____ High (upper 15% of people)
   ____ Very high (upper 5%)

10. CONFIDENCE IN YOUR ABILITIES: Possession of the feeling that you have enough skill and ability to succeed at what you try.
    ____ Below average
    ____ About average
    ____ Above average
    ____ High (upper 15% of people)
    ____ Very high (upper 5%)

11. MATHEMATICAL REASONING ABILITY: Ability to reason in mathematical terms and come up with correct solutions; ability to handle numerical data with accuracy.
    ____ Below average
    ____ About average
    ____ Above average
    ____ High (upper 15% of people)
    ____ Very high (upper 5%)

THANK YOU!